

POLICY INTENT NOTICE**Subject:** Lighting System Retrofits**FILE NO.:****13****DATE FIRST ISSUED:** 7/11/95**REVISION DATE:** 06/19/08

Lighting system retrofits are performed in health care facilities for a variety of reasons, but normally to reduce operation and maintenance costs. The system retrofits typically consist of one or more of the following modifications:

- Ballast and/or lamp replacement.
- Lamp and/or ballast removal.
- Reflector installation.
- Fixture replacement.

When properly performed, system retrofits can lead to improved illumination and reduced energy consumption. However, some retrofit techniques adversely affect the illumination quality. To ensure that the quality of lighting is maintained, Article 517.22(b), 2007/ 2004 California Electrical Code (CEC) requires that illumination intensity values be as recommended in the latest edition of the Illumination Engineering Society (IES) Handbook.

POLICY:

Lighting system retrofits shall be submitted to the Office for plan review. Such submittals shall include:

1. Lighting calculations in accordance with the latest edition of the IES Handbook. A suggested format is a schedule of rooms to be retrofitted, showing the use of the area, dimensions of the room, height of the work plane, the illuminance recommended by IES, and the predicted illuminance.
2. Plans and specifications signed and stamped by a California registered electrical engineer pursuant to Section 7-115(a), 2007 California Administrative Code (CAC).
3. A list of the assumptions used in the calculations, including reflectances, depreciation factors, etc.
4. Certified photometrics for each new or modified luminaire, including spacing criteria.
5. Reflected ceiling plan for each area that shows the location of fixtures in each area to be retrofitted.
6. Confirmation that the components to be used in the retrofit are listed, labeled, or certified by a Nationally Recognized Testing Laboratory, in accordance with Article 110.2 of the 2007/ 2004 CEC; and where fixtures are installed in fire rated ceiling assemblies, each fixture shall be protected

to meet the fire rating criteria in Section 711, 2007 California Building Code;
(Section 711 of the 2001 CBC).

7. Plans and specifications for any circuiting and switching changes.

The above requirements are waived for one-for-one replacement, lamp and ballast retrofits. In these instances only a key plan, written description and specification are required to be submitted to the Office for review.

<u>Original Signed</u>	<u>06/19/08</u>
John D. Gillengerten	Date